Plan & Deploy
Data Protection & Availability

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Planning & Deploy – Data Protection & Availability

Industry	Typical Data Retention Requirements
Healthcare	• Patient lifetime
Pharmaceutical	• 75 – 100 years for R&D records, applications
Energy	• Oil field lifetime • >50 years for subsurface exploration data
Government	• >100 years
Finance	• Lifetime of the life insurance policy, plus 6-10 years
Aerospace	• >30 years for design records (lifetime of aircraft)

Impacts of Data Unavailability

Lost Productivity
* Number of employees impacted x hours of outage x hourly rate

Lost Revenue
* Direct loss
* Compensatory payments
* Future revenue loss
* Billing losses
* Investment losses

Damaged Reputation
* Customers
* Suppliers
* Financial markets
* Banks
* Business partners

Financial Performance
* Revenue recognition
* Cash flow
* Lost discounts
* Payment guarantees
* Credit rating
* Stock price

Other Expenses
* Temporary employees, equipment rental, overtime costs, extra shipping costs, travel expenses, and so on.

Planning & Deploy – Data Protection & Availability

Identify the Purpose

Understand the Environment

Identify the Risk

Capacity or Performance

Scalability

Backup	Recovery	Archive	Availability
Replication	Compliance	Migration	Resiliency
Cloud	BAAS	DR-AAS	Infrastructure
Applications	OS	RTO	RPO
MTBF	MTTR	MTRS	Security
Data Loss	Redundant	Media	Fault-tolerance
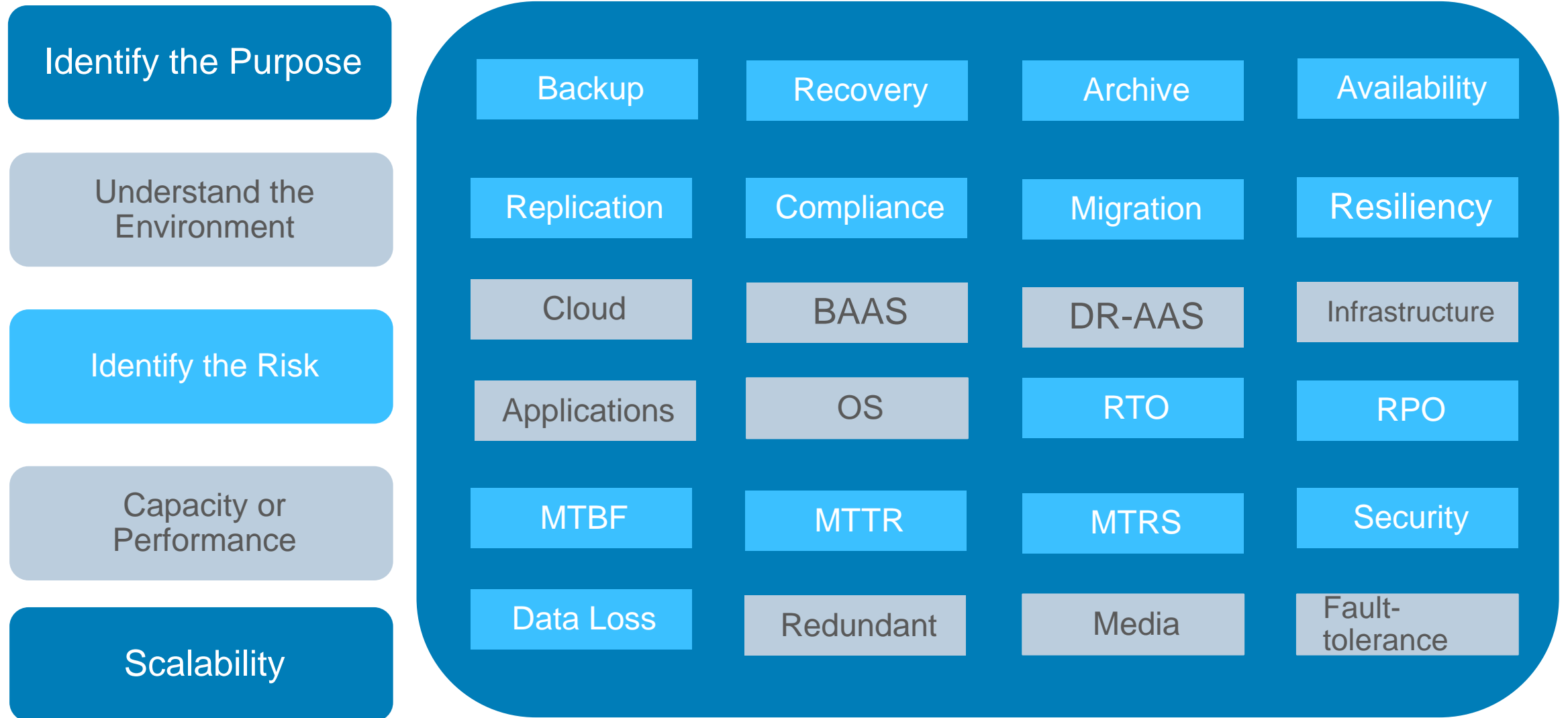
Use Case

Products Involved: Avamar, NDMP, Data Domain, VMware, Exchange and DPA (Data Protection Advisor).
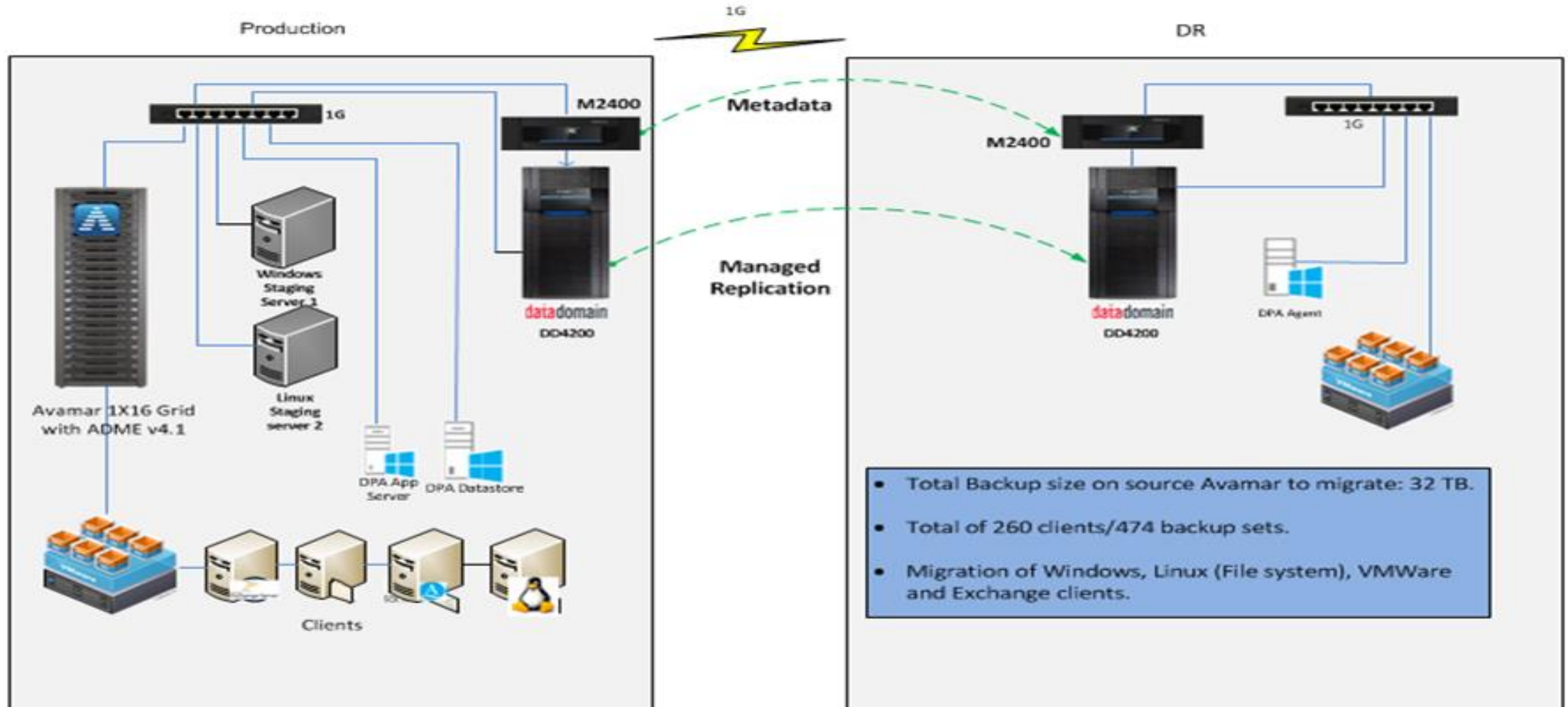**Scope of the project: Avamar Install and Integration with DD , NDMP Integration ,VM Image backups & restores. DPA reporting for Avamar and data domain .**
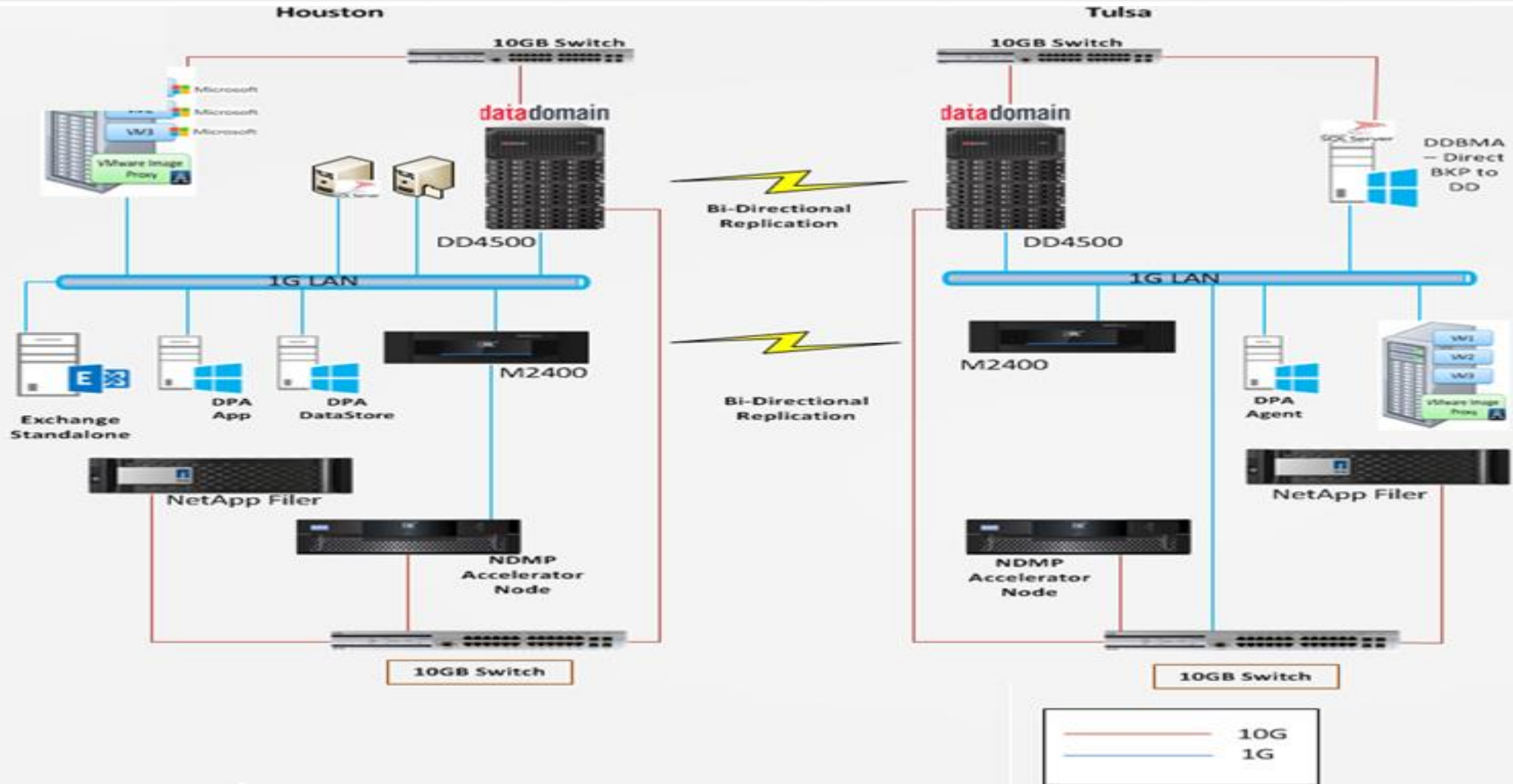
Use Case

Products Involved: Avamar 7.2 ADS, Avamar Data Migration Enabler, Data Domain 4200s and Avamar Single M2400 nodes.
Scope of the project: Migration of existing Avamar clients/data.

Production

1G

DR

M2400

Metadata

M2400

1G

Windows
Staging
Server 1

datadomain
DD4200

Managed
Replication

datadomain
DD4200

DPA Agent

Linux
Staging
server 2

Avamar 1X16 Grid
with ADME v4.1

DPA App
Server

DPA Datastore

- Total Backup size on source Avamar to migrate: 32 TB.
- Total of 260 clients/474 backup sets.
- Migration of Windows, Linux (File system), VMWare and Exchange clients.

Clients

Source of use case: Subodh Kanbarkar , Solution Architect

Dell EMC Services

Capabilities

CONSULTING SERVICES	TECHNOLOGY & DEPLOYMENT SERVICES	CLOUD SERVICES	SUPPORT SERVICES	EDUCATION SERVICES

• **Strategy, planning, execution**
 	
• IT transformation:
  – Infrastructure
  – Operating model
  – Applications
 	
• End user
 	
• Hybrid cloud
	• *Design, installation, configuration*
	
	• *Data migration*
	
	• **Optimization**
	
	• **Residents**
	
	• **DSEs**
		• IaaS hosted enterprise apps
		
		• Storage, Backup, Archive as a Service
		
		• End-to-end management:
		  – Cloud
		  – Applications
		  – Infrastructure
		  – Out Tasking
			• Proactive/predictive HW and SW support	• Organization & skills transformation
				
				• Technical training & certification

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